

Welding Wire in the Wire-Drawing Process

SOV/135-59-3-17/24

cam design (Fig. 2), was installed in an "ASIF-25" welder for thick wire (concrete reinforcement wire) and eliminated the fault there. There are 2 diagrams and 1 table.

ASSOCIATION: Ural'skiy politekhnicheskii institut im. S.M. Kirova (The Urals Polytechnical Institute imeni S.M. Kirov)

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SOV/133-59-4-27/32

AUTHOR: Galaktionov, A.T., Candidate of Technical Sciences, and
Pofanov, A.A., Engineer

TITLE: ~~Butt Welding of High Carbon and Alloy Wire~~ (Stykovaya
svarka vysokouglerodistoy i legirovannoy provoloki)

PERIODICAL: Stal', 1959, Nr 4, pp 374-377 (USSR)

ABSTRACT: On the proposal of the Beloretsk Steel-Wire Works, the
Ural Polytechnical Institute investigated causes of
breakage of butt welded wire during drawing and developed
methods of producing high quality joints for wire
1.5 to 6 mm in diameter from steels U9A, U10A, 65G,
1Kh18N9T and alloys Kh15N60 and Kh20N80. The quality
of the welded joints was determined on the basis of
results of mechanical testing for strength, number of
bends, hardness of the joint on neighbouring zones,
technological drawing tests and metallographic studies.
The following causes of breaks were established:
1) the presence of oxides in the joint (Fig 1 and 2);
2) deviation of the hardness and strength of metal in
the joint and neighbouring zone from those of the main
metal; 3) overheating of the metal in the joint with the

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Butt Welding of High Carbon and Alloy Wire

formation of a structure of low plasticity and
4) weakening of the point of weld during the removal of burr. The dependence of mechanical properties of welded joints on the value of specific pressure applied during welding is shown in Fig 3 and the comparison of the results of mechanical and technological testing of welded joints of an alloy wire (1Kh18N9T) 6 mm in diameter welded by resistance and by melting in the table. It was found that the existing butt welding apparatus of low power cannot satisfy requirements of the modern wire drawing industry. For wire above 4 mm in diameter, it is necessary to design contact butt welding automatic equipment which welds by melting. Such equipment should be able to remove burrs directly after welding in hot plastic state and thermally treat the joint according to predetermined practice with retention at 500 to 600°C during cooling (to prevent hardening). Wire below 4 mm in diameter should be welded with an apparatus which can apply a small specific pressure at the beginning of welding (0.2 to 0.3 kg/mm²)

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Butt Welding of High Carbon and Alloy Wire

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sharply increasing it at the end of the process. There
are 5 figures and 1 table.

ASSOCIATION: Ural'skiy politekhnicheskii institut (Ural Poly-
technical Institute)

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18(7)

30V/125-59-7-4/19

AUTHOR: Galaktionov, A.T., and Pofanov, A.A.

TITLE: Research on Butt-Welding of Carbon-Steel and Alloyed Wire

PERIODICAL: Avtomaticheskaya svarka, 1959, Nr 7, pp 21-26 (USSR)

ABSTRACT: The process of wire drawing imposes exceptionally high requirements on the butt-welded wire joints as regards their strength, plastic properties and absence of defects. If the strength of the joint is inferior to that of the base metal used, or if the joint is not plastic enough - both these factors may entail the wire breakage during the process of drawing. In this connection tests were conducted at the Ural Polytechnic Institute with a view to establishing the best method for butt-welding of wire 6 mm in diameter. It is to be noted that wire of this size is used as primary material for wire drawing, and can serve as a general example in judging the quality of welded joint. In order to find out the best conditions under which

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SOV/125-50-7-4/19

Research on Butt-Welding of Carbon-Steel and Alloyed Wire

the above mentioned kind of welding should be performed, the effect of the different parameters was taken in consideration used in the process of welding, on the mechanical properties and structure of the welded joint. In the experimental stage, two methods of welding were tested: the flash-butt welding and the resistance welding. In the course of research it was established that the flash-butt welding is superior to the resistance welding, as it particularly improved the plastic properties of the weld. That is why it is necessary to construct automatic welders for flash-butt welding. These welders must be equipped with special designs for removing the remaining flash material immediately upon completion of the welding process, while the wire is still hot and plastic. The heat-affected zone at the flash-butt welding amounts to 5-8 mm, which is far less than at the resistance welding. The metal hardness in the heat-affected zone

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Research on Butt-Welding of Carbon-Steel and Alloyed Wire

approaches after the heat-treatment to the hardness of the base metal. The heat-treatment of welds obtained by both methods - flash and resistance - was the same. However, the steel test-pieces welded by the butt flash underwent breakage at a distance of 3-8 mm from the weld, whereas the pieces welded by resistance method were broken at the weld itself. There are 2 graphs, 1 table, 1 diagram and 2 pictures.

ASSOCIATION: Ural'skiy politekhnicheskii institut imeni S.M. Kirova
(The Ural Polytechnic Institute imeni S.M. Kirov)

SUBMITTED: October 13, 1952

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FOFANOV, A. A., Cand Tech Sci -- (diss) "Research into the butt-welding of wire (applicable to the conditions of wire-drawing production)." Sverdlovsk, 1960. 16 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Ural'skiy Polytechnic Inst im S. M. Kirov); 150 copies; price not given; (KL, 19-60, 135)

FROLOV, V.V.; LAZAREV, B.L.; GAVRILYUK, L.Ya.; FOPANOV, A.A.

Operation of blast furnaces with fluxed sinter made of Tagil-Kushva
region ores. Stal' 21 no. 4:296-299 Ap '61. (MIRA 14:4)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat i Ural'skiy institut
chernykh metallov.

(Ural Mountains--Iron ores) (Blast furnaces)

POFANOV, A.A., kand.tekhn.nauk; GAVRILYUK, L.Ya., inzh.; DUBROV, N.F.;
GORLACH, I.A.; PRIVALOV, S.S.

New developments in research. Stal' 21 no.5; 402-403, 414 My '61.
(MIRA 14:5)

(Ural Mountains--Metallurgical furnaces)
(Zhdanov--Blast furnaces)

BORISOV, Yu.S.; FOFANOV, A.A.

Investigation of the blast furnace process with introduction of
liquid fuel into the hearth. Stal' 21 no.6:492-498 Je '61.

(MIRA 14:5)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.
(Blast furnaces)
(Petroleum as fuel)

FOFANOV, A.A., kand.tekhn.nauk; KHOVANETS, V.K., inzh.;
DROBININ, A.F., inzh.; PRAKHOV, A.I., inzh.

Electric cutting of multicore cables with simultaneous welding
of the cores at the severed ends. Svar. proizv. no.8:29-30
Ag '61. (MIRA 14:8)

1. Ural'skiy politekhnicheskiy institut (for Fofanov, Khovanets).
2. Sverdlovskiy NIPTIMASH (for Drobinin, Prakhov).
(Electric metal cutting)
(Electric cables)

KHOVANITS, V.K.; FOFANOV, A.A.; DROBININ, A.F.; PRAKHOV, A.I.

Automatic machine for measured electric cutting of multiple
core conductors and the welding of their ends. Avtom. svar.
14 no.10:80-83 0 '61. (MIRA 14:9)

1. Ural'skiy politekhnicheskii institut imeni S.M. Kirova (for
Khovanets, Fofanov). 2. Sverdlovskiy NIPTIMAS (for
Drobinin, Brakhov).
(Electric conductors) (Electric metal cutting)

FOFANOV, A.A., kand.tekhn.nauk; DURNOV, V.K., inzh.; PASHKEYEV, G.G., inzh.

Blast furnace smelting of a charge with partial removal of
fines before charging into the furnace. Stal' 22 no.9:

783-785 S '62.

(MIRA 15:11)

(Blast furnaces)

OSTROUKHOV, M.Ya.; PANCHENKO, S.I.; Prinimali uchastiye: FRISHBERG, V.D.;
PETROV, V.K.; RESHETKO, A.; VYATKIN, G.P.; BRATCHENKO, V.P.;
POFANOV, A.A.; MILYAYEV, M.N.; PRIVALOV, V.Ye.; MUSTAFIN, F.A.;
PUSHKASH, I.I.; LAZAREV, B.L.

Experimental blast furnace smelting using coke from wet
preparation coals. [Sber. trud.] Nauch.-issl.inst.met.
no.4:63-70 '61. (MIRA 15:11)

1. Vostochnyy uglekhimicheskiy institut (for Ostroukhov, Panchenko,
Frishberg, Petrov, Reshetko). 2. Nauchno-issledovatel'skiy institut
metallurgii (for Vyatkin, Bratchenko). 3. Nizhne-Tagil'skiy
metallurgicheskiy kombinat (for Privalov, Mustafin, Pushkash,
Lazarev).

(Blast furnaces—Testing)
(Coke—Testing)

GALAKTIONOV, A.T., kand. tekhn. nauk; SVIT, P.P., inzh.; FOFANOV,
A.A., kand. tekhn. nauk

Modernizing the ASIF-25 machine. Svar. proizv. no.8:38-39
Ag '63. (MIRA 17:1)

1. Ural'skiy politekhnicheskii institut im. S.M. Kirova.

SVIT, P.P., inzh.; FOFANOV, A.A., kand.tekhn.nauk; ZHURAVLEV, L.G., kand.
tekhn.nauk

Butt welding of high-speed steel wire during drawing. Svar.proizv.
no.4:25-26 Ap '64. (MIRA 18:4)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.

FOFANOV, B.M.

Improvement of work organization is the most important factor
in increasing labor productivity in test drilling. Uch.zap.
SAIGIMS no.5:135-142 '61. (MIRA 15:11)
(Soviet Central Asia--Boring--Labor productivity)

DZHAMALOV, O.B., doktor ekon. nauk; VOLOTKO, N.A.; YUN, D.N.,
kand. ekon. nauk; FOFONOV, B.M., kand. ekon. nauk;
KALYAKIN, P.V., kand. ekon. nauk; DESYATCHIKOV, B.A.,
kand. ekon. nauk; KHUDKOVSKIY, A.B., kand. ekon. nauk;
ARTYKOV, A., kand. ekon. nauk; FOKIN, A.I.; UL'MASOV, A.,
kand. ekon. nauk; YAKOVENKO, Ye., red.; BAKHTIYAROV, A.,
tekhn. red.

[Principles of the economics of Uzbekistan industry] Osno-
vy ekonomiki promyshlennosti Uzbekistana; uchebnoe posobie
Tashkent, Gosizdat UzSSR, 1963. 282 p. (MIRA 17:1)

FOFANOV, G.A.

Centrifugal oil filters on diesel locomotives. Trudy MIIT
no.110:60-77 '59. (MIRA 13:4)
(Diesel locomotives--Oil filters)

FOFANOV, G.A., inzh.

Effect of the method of purification of diesel oils on the
microstructure of mechanical impurities. Trudy MIIT no.122:
132-137 '59. (MIRA 13:5)
(Diesel fuels)

VOLODIN, A.I., kand.tekhn.nauk; FOFANOV, G.A., inzh.

Systems for bench testing of diesel locomotives. Vest.TSMII 19

no.8:24-27 '60.

(MIRA 13:12)

(Diesel locomotives--Testing)

VOLODIN, Aleksey Iosifovich, kand. tekhn. nauk; FOFANOV, Gleb
Aleksandrovich, inzh.; RYLEYEV, G.S., inzh., retsenzent;
KISELEVA, N.P., inzh., red.; VOROTNIKOVA, L.F., tekhn. red.

[Saving fuel in the operation of diesel locomotives] Ekonomia
topлива na teplovozhakh. Moskva, Vses. izdatel'sko-poligr. ob"-
edinenie M-va soobshcheniia, 1962. 86 p. (MIRA 15:3)
(Diesel locomotives)

FOFANOV, G.A., inzh., red.; MEL'NIKOV, V.Ye., red.; VOROTNIKOVA,
L.P., tekhn. red.

[Advanced methods for fuel economy on diesel locomotives]
Peredovye metody ekonomii topliva na teplovozhakh; sbornik
statey. Moskva, Transzheldorizdat, 1963. 42 p.

(MIRA 16:8)

(Diesel locomotives--Fuel consumption)

VOLODIN, A.I., kand. tekhn. nauk; ~~ROFANOV~~, G.A., inzh.; KISELEVA,
N.P., inzh., red.; VOROTNIKOVA, L.F., tekhn. red.

[Fuel economy in the operation of diesel locomotives] Eko-
nomia topliva na teplovozhakh. Izd.2., dop. Moskva, Trans-
zheldorizdat, 1963. 101 p. (MIRA 16:7)
(Diesel locomotives--Fuel consumption)

VOLODIN, A.I.; NIKUSHIN, A.I.; FOFANOV, G.A.

Means for saving diesel fuel. Elek. i tepl. tiaga 7 no.4:37-39
Ap '63. (MIRA 16:5)

1. Sotrudniki Vsesoyuznogo nauchno-issledovatel'skogo instituta
zheleznodorozhnogo transporta.

(Diesel fuels)

FOFANOV, I.

Some problems in the stimulation of production and the introduction of modern technology. Vop.ekon. no.6:14-21 Ja '59.
(MIRA 12:9)

(Technology)

POFANOV, I.; ANISIMOV, G.; GORHENKO, Ye.; KRUGLIKOV, T.; LOMEYKO, P.;
NIKOLAYEV, M.

Awarding premiums for new equipment in production. Sots.trud
4 no.2:45-52 F '59. (MIRA 12:4)
(Inventions, Employees)
(Rewards (Prizes, etc.))

AUTHOR: Fofanov, I.G., Engineer SOV/122-59-4-17/28
TITLE: On the Basic Trends of Development of Machining Processes
for Metals (Ob osnovnykh napravleniyakh razvitiya
tekhnologii mekhanicheskoy obrabotki metallov)
PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 4, pp 64-67 (USSR)
ABSTRACT: Metal cutting accounts for about half the labour cost
in the manufacture of machines. The improvement of
machining operations requires the introduction of new
high output and specialised machine tools, including
automatics. New special machine tools, mainly unit-type
and multi-station type, must be increased in percentage
from about 3% in 1955 to 11% in 1965 (in the U.S.A., the
proportion of automatic and semi-automatic machine tools
was 4.5% in 1953). The total saving during the 7-year
plan will be 30,000 million rubles, compared with a total
investment of 16,000 million rubles. The greatest
challenge is an advance in small batch and individual
manufacture. (Even in the U.S.A., articles produced to a
total below 25 components per annum occupy 90% of the
total engineering production). Machine tools with
programme control can be a help in this connection.

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SOV/122-59-4-17/28

On the Basic Trends of Development of Machining Processes for Metals
Integrated automation is the distinguishing feature of the automatic production lines, which increases the productivity of labour by 30-50%. 1300 lines will be introduced during the 7-year plan. 2.8 thousand million rubles will be spent on the modernisation of existing machine tools. The production of machine tools by conveyor belt methods is to reach 70% of the total. Special significance is attached to the application of production flow principles in small batches (multi-component group production lines and group machining of components with resetting of equipment by the method of Engineer Mitrofanov). Production lines will increase labour productivity by 20-30%. 8,000 new production lines for mass and large batch production are planned including multi-component small batch lines. A total saving of 3.5 thousand million rubles for an investment of 0.7 thousand million rubles is expected. To reduce auxiliary times, standardized advanced production fixtures including universal tooling systems, especially for small batch manufacture, are foreseen. The mechanization and automation of assembly and fitting operations in the USSR

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SOV/122-59-4-17/28

On the Basic Trends of Development of Machining Processes for Metals are still greatly behind the most advanced industries (motor car, electrical and radio) in the USA. Mechanized tools of pneumatic, electrical and hydraulic types are required in great quantities. Electro-erosion and ultrasonic machining methods will be greatly extended. The reduction in the number of inspectors will be achieved by automatic adjustment and regulation of machining operations. Scientific research work is to be greatly expanded. Productionising of design will be considered of decisive importance and will be examined in the project stage. The majority of cutting tools in the USSR are made of steels 2-3 times less resistant than those used abroad. In the application of 18% tungsten high speed steel, the USSR lags behind the USA and England. All types of high output tool materials must be improved. The use of carbon tool steel should be entirely abolished. Carbide tipped tools should increase in percentage of the total from 12.8 to 22% between 1956 and 1965. The quality and limited range of grinding wheels has become a serious brake on grinding operations and must be improved. The rapid introduction

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On the Basic Trends of Development of Machining Processes for Metals
of new techniques required incentive systems already
approved by the Council of Ministers. The systems must
be publicised and widely applied.

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FOIA NOV, 1, 6

PLATE 1 BOOK EXPLANATIONS NOV/7/78

Scanned copy of the book "Manufacturing Processes in the Machine Tool Industry" (Present State of the Manufacturing Processes in the Machine Tool Industry) (Russian for Development) Moscow, 1960. 50 p. 5,000 copies printed.

Ed.: Anatoly Shalyavich Gavrilov, Doctor of Technical Sciences, Professor, Managing Ed. for Literature on Machine Building and Instrument Construction (Vladimir S. I. Pavlovsky, Engineer Ed. of Publishing House: G. I. Loshakov, Engineer Tech. Ed.: V. J. Klyud and A. A. Tikhonov).

PURPOSE: This book is intended for technical and scientific personnel in the machine and instrument industries and for students and teachers of schools of higher education.

CONTENTS: The book deals with current theory and practice in the manufacturing processes of the machine and instrument industries and includes discussions on trends for development. The typical nature of the processes and their technological-economic features and possibilities are considered. Particular attention is given to new and progressive processing (superplastic forming, electric molding, cold churning, precision casting, precision pressing, new methods of welding, etc.). The book consists of reports presented at the All-Union Card 1/11

Scientific-Industrial Conference on "Advanced Machine and Instrument Building Processes" held in 1960. The papers have been revised in the light of recent developments in the field. A chapter is devoted to the situation and modernization of the industry. Soviet and non-Soviet references are given at the end of the chapters.

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PART III. TECHNICAL-ECONOMIC PRODUCTION PROBLEMS
IN THE MACHINE AND INSTRUMENT INDUSTRIES

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- AVAILABLE: Library of Congress (TJ1160.G34) VK/wrc/sfm
Card 11/11 2/15/61

POFANOV, I. G.

Machines should be durable. Izobr. i rats. no.11:26-29 N '60.
(MIRA 13:10)

1. Glavnyy spetsialist Gosudarstvennyy nauchno-tekhnicheskogo
komiteta Soveta ministrov SSSR.

(Machinery--Technological innovations)

FOFANOV, N., polkovnik

Firm habits. Voen.vest. 41 no.10:88-89 0 '61. (MIRA 15:2)
(Military field engineering)

FOFANOV, O. N.

Cand Tech Sci - (diss) "Method of compensation of forces and its use for graduating and checking of dynamometers." Novosibirsk, 1961. 12 pp; (Academy of Sciences USSR, Siberian Division, Joint Academic Council for Phys-Math and Tech Sci); 220 copies; price not given; (KL, 10-61 sup, 219)

POFANOV, N.V., inzh.

Focusing the signal mechanism equipped with ZhS-11 and ZhS-12 lamps.
Avtom., telem. i sviaz' 2 no.6:37-38 Je '58. (MIRA 11:6).

1. Kontrol'no-izmeritel'nyy punkt 5-y distantsii signalizatsii i
svyazi Stalinskoy dorogi.

(Railroads--Signaling)

AUTHOR: Fofanov, O.N. SOV-115-58-4-15/45

TITLE: A Method and Apparatus for the Calibration and Checking of Dynamometers (Metod i apparatura dlya graduirovki i poverki dinamometrov)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 4, pp 28-30 (USSR)

ABSTRACT: A method of checking and calibrating dynamometers is described. The effectiveness of this method was tested by experiment, using a KGM-5 apparatus capable of reproducing forces up to 5,000 kg. The results demonstrated the practicability of a dynamometer checking machine incorporating a constant power gage and a device for the periodic calibration of this gage from the constant mass load. For this purpose a KGM-50 apparatus was constructed, designed for checking and calibrating dynamometers up to 50 tons. The operation and characteristics of this apparatus are given. There are 4 tables and 2 schematic diagrams.

1. Dynamometers--Calibration

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28(5)

SOV/115-59-3-14/29

AUTHOR: Fofanov, O.N.

TITLE: An Electromechanical Pull Dynamometer for 50,000 kg
(Elektromekhanicheskiy tyagovyy dinamometr na
50000 kgs)

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 3, pp 25-26(USSR)

ABSTRACT: Electric dynamometers containing wire transducers require more attention and qualified service than mechanical dynamometers. Therefore mechanical dynamometers will be preferred when direct visual observation of the readings is possible. The author suggests a universal dynamometer which functions either as a mechanical or as an electrical dynamometer. Figure 1 shows the design of this device. It consists of a stretch bar fastened to two holding devices, one of which has a tubular shape. An elastic joint between the two holding devices protects the stretch rod from torsional forces. Loads exceeding the capacity of the stretch bar and prevented by

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An Electromechanical Pull Dynamometer for 50,000 kg

a mechanical connection of the two holding devices. With this dynamometer, mechanical and electric measurements of pulls may be performed. A difference in the readings of the mechanical and the electrical channel, exceeding the range of permissible errors, will indicate defects immediately. The electrical part of the bridge is shown by figure 2. It consists of a bridge with four active arms composed of constant wire transducers glued by glue BF-4 to the stretch rod. Actually, there are four such bridges, which may be used, if the first one shows defects. For determining the forces acting on the dynamometer, a lever indicator with a dial is used for the mechanical part. For the electrical channel, standard automatic electronic bridges and potentiometers may be used, for example, bridge EMD-112 and potentiometer EPD-02. Three models of the dynamometer were built and tested according to Instruction 20-49 of the Komitet standartov, mer i

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An Electromechanical Pull Dynamometer for 50,000 kg

izmeritel'nykh priborov (Committee of Standards, Measures and Measuring Instruments). The mechanical part showed deviations of 200 kg while those of the electrical part were one and a half times below this value. The tests were repeated after two months, whereby the error did not exceed 250 kg for all load ranges. There are: 1 drawing and 1 circuit diagram.

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POFANOV, O.N.

Machine for graduation and inspection of dynamometers up to 50
ton. Izm.tekh. no.9:22-23 S '60. (MIRA 13:9)
(Dynamometer)

ACC NR: AP7002684

SOURCE CODE: UR/0244/66/025/006/0003/0009

AUTHOR: Klyushkina, N.S. (Moscow); Fofanov, V. I. (Moscow)

ORG: none

TITLE: Isolation of proteins from unicellular algae

SOURCE: Voprosy pitaniya, v. 25, no. 6, 1966, 3-9

TOPIC TAGS: algae, ~~animal~~ nutrition, protein ~~extraction, life support~~
system

ABSTRACT Ninety percent disintegration of protococcal seaweed cells was accomplished by using a homogenizer with a propeller-type mixer at 14,000 rpm, and a microscopic abrasive as the disintegrating agent. Albumen was easily extracted from the disintegrated cells by using a weak alkaline solution and acid precipitation of the cells (pH 4.5—5.0). Digestion of protococcal albumen was twice as high as the digestion of unprocessed biomass. White rats fed on this bleached albumen for 4 months showed a positive nitrogen balance without any signs of intoxication. No reproductive disorders were observed. Figs. 1 and 2 show the comparative sizes of rats in the control and experimental groups. [SC]

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UDC: 613.26:582.26-113.44

ACC NR: AP7002684



Fig. 1. Control group of rats
at 1 month.



Fig. 2. Experimental group of
rats at 1 month.

SUB CODE: 06/ SUBM DATE: 11Apr66/ ORIG REF: 002/ OTH REF: 016
ATD PRESS: 5113

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KRAVCHENKO, A. T.; FOFANOV, V. I.

Protective action against radiation sickness of native and purified concentrated sera of irradiated animals. Med. rad. no.12: 46-50 '61. (MIRA 15:7)

(RADIATION SICKNESS) (SERUM)

KRAVCHENKO, A.T.; FOFANOV, V.I.

Protective action against radiation sickness of natural sera
from irradiated animals. Med.rad. 6 no.8:23-27 Ag '61. (MIRA 14:8)
(GAMMA RAYS—PHYSIOLOGICAL EFFECT) (SERUM) (IMMUNITY)

SAVVE, V.D.; FOFANOV, V.I.; NIKITINA, V.D.

Use of the multimembrane electrodecantation method in the purification and concentration of proteinase. Vop. med. khim. 7 no.5:532-537 S-0 '61. (MIRA 14:10)

1. The Research Institute of Sanitation of the Ministry of Defense of the U.S.S.R.

(PROTEINASE)

ACCESSION NR: AP4003200

S/0241/63/008/012/0055/0059

AUTHOR: Fofanov, V. I.; Kravchenko, A. T.

TITLE: Study of the feasibility of preparing immune sera for alleviating radiation sickness in test animals

SOURCE: Meditsinskaya radiologiya, v. 8, no. 12, 1963, 55-59

TOPIC TAGS: serum, immune serum, radiation sickness, serum globulin, serum protein, radioresistance, radioprotector

ABSTRACT: Specific antigens were separated from serum of irradiated rats by an aluminum hydroxide sorption method to make immune sera. In the first of two experimental series albino rats received single, double, or triple (at 7 day intervals) immunization with the sera before irradiation. The animals were then irradiated with single 400 r doses and blood sera were taken on the 15th day to study their therapeutic effects; in the second experimental series. In this series animals were gamma-irradiated with single 500 r doses and the serum preparations were administered intraperitoneally 1 hr later. Survival of animals, course of radiation sickness, and leukocyte level served as indices. Results show that triple immunization be-

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ACCESSION NR: AP4003200

fore irradiation increases radioresistance of animals, but single and double immunization are less effective. Serum from triple immunized animals administered before irradiation has the same effect on survival and alleviation of radiation sickness as triple immunization with 7 day intervals. Immunized nonirradiated animals can also be used to obtain immune serum. Serum preparations administered 1 hr after irradiation do not prevent the development of leukopenia, but the leukocyte level is higher in animals who have received serum resulting from triple immunization. Separation of specific antigens from serum for immune sera is feasible and requires further development for more effective immunization. Orig. art. has: 3 tables, 1 figure.

ASSOCIATION: none

SUBMITTED: 25 Nov 61

DATE ACQ: 09 Jan 64

ENCL: 00

SUB CODE: AM

NO REF SOV: 004

OTHER: 002

Card 2/2

ACC NR: AT6036582

SOURCE CODE: UR/0000/66/000/000/0206/0207

AUTHOR: Klyushkina, N. S.; Troitskaya, I. T.; Ushakov, A. S.; Fofanov, V. I.

ORG: none

TITLE: The problem of the nutritional value of proteins from unicellular algae
[Paper presented at the Conference on Problems of Space Medicine held in Moscow
from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966, Problemy
kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii,
Moscow, 1966, 206-207

TOPIC TAGS: life support system, closed ecological system, space nutrition, space
food, chlorella

ABSTRACT: Proteins constitute from 8-88% of unicellular algae depending on
the method of their cultivation. The present experiment was performed
in order to determine the nutritional value of algal proteins.

The biomass of algae, obtained by the open cultivation method, was
subjected to discoloration by alcohol. This process removed a significant
amount of pigments, toxins, and allergens. The digestibility of proteins
in the discolored mass, as determined in vitro, reached 70%.

Card 1/2

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ACC NR: AT6036582

Experiments were performed on rats which were placed on diets whose only protein source was unicellular algae (Chlorella and Scenedesmus). Rats fed on casein and soya-bean proteins were used as controls. Experimental feeding was continued for 122 days. Observations were performed with respect to weight, growth, effectiveness of digestive processes, and nitrogen balance, as well as a series of biochemical indices which indicate the value of the protein component of nutrition. Generative functions and immunological resistance of the experimental animals were also tested.

The results indicate that Chlorella and Scenedesmus proteins possess great biological value. At the same time a certain retardation in the weight increase of experimental animals was noted. This confirms the known data concerning the deficit of sulphur-bearing amino acids in proteins of vegetable origin. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

POFANOV, V.P., nauchnyy sotrudnik

Work forms and methods of departments for the organization of the public health system and the history of medicine at medical institutes and institutes for advanced medical training in assistance to public health agencies and institutions. Zdrav. Ros. Feder. 5 no. 2:25-31 F '61. (MIRA 14:2)

1. Iz nauchno-organizatsionnogo otdela (zav. - prof. S.M. Danyushevskiy) Instituta organizatsii zdravookhraneniya i istorii meditsiny imeni N.A. Semashko.
(PUBLIC HEALTH)

BARKMAN, E.M., prof.; FOFANOV, V.P.

Teaching of disability evaluation in medical institutes. Zdrav.
Ros. Feder. 6 no.4:11-15 Ap '62. (MIRA 15:4)

1. Iz kafedry organizatsii zdravookhraneniya (zav. - prof. N.A.
Vinogradov) Tsentral'nogo instituta usovershenstvovaniya vrachey
(rektor M.D.Kovrigina).

(DISABILITY EVALUATION--STUDY AND TEACHING)

BARKMAN, E. M.; FOFANOV, V. P.

"Collection of scientific and practical works on the organization of the public health system and the history of medicine".
Reviewed by E. M. Barkman, V. P. Fofanov. Zdrav. Ros. Feder. 6
no.6:38-39 Je '62. (MIRA 15:7)

(~~PERM PROVINCE~~ DISEASES REPORTING)
(PUBLIC HEALTH)

BARKMAN, E.M., prof.; FOFANOV, V.P., assistant

Work of the Department for the Organization of Public Health
Service of the Central Institute for the Improvement of
Physicians in carrying out periodic out-of-town activities.
Zdrav. Ros. Feder. 7 no.5:21-23 My'63. (MIRA 16:6)

1. Iz kafedry organizatsii zdravookhraneniya (zav. - prof.
N.A.Vinogradov) Tsentral'nogo instituta usovershenstvovaniya
vrachey (rektor M.D.Kovrigina).
(PUBLIC HEALTH)

SURKOV, V.D.; FOFANOV, Yu.F.

Value of Reynold's critical number in vibrating flows. Izv.
vys. ucheb. zav.; pishch. tekhn. no.6:102-107 '63.

(MIRA 17:3)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy
promyshlennosti, kafedra tekhnologii molek.

FOFANOV, Yu.P.

Surgeon's technique in a bilateral pneumothorax. Trudy TSIU
59:173-181 '63. (MIRA 17:9)

1. III khirurgicheskaya klinika (zav. prof. V.I. Kazanskiy)
TSentral'nogo instituta usovershenstvovaniya vrachey na baze
TSentral'noy klinicheskoy bol'nitsy Ministerstva putey
soobshcheniya (nachal'nik zasluzhennyy vrach RSFSR V.N.
Zakharchenk).

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LOPUKHOV, Petr Mikhaylovich; FOFANOVA, L., red.; MOKROUSOVA, A.,
tekhn. red.

[Rank and file members of the power engineering industry]
Riadvye sluzhby energetiki. Saratov, Saratovskoe knizhnoe
izd-vo, 1963. 19 p. (MIRA 17:1)

MOLDAVSKIY, Oleg Petrovich; MARKUSHIN, Gennadiy Nikolayevich;
POLYAKOV, Lev Petrovich; RAZUVAYEV, Vladimir
Dmitriyevich; FOFANOVA, L., red.

[Improving boring equipment and technology] Sovershen-
stvovanie tekhniki i tekhnologii bureniya. [By] O.P.
Moldavskiy i dr. Saratov, Saratovskoe knizhnoe izd-vo,
1963. 80 p. (MIRA 17:7)

MELKOV, Mikhail Petrovich, doktor tekhn. nauk; FOFANOVA, L., red.

[Electrolytic building-up of machine parts with solid iron]
Elektricheskoe narashchivanie detalei mashin tverdym zhele-
zom. Saratov, Privolzhskoe knizhnoe izd-vo, 1964. 203 p.
(MIRA 17:10)

SOROKIN, Leonid Dmitriyevich; NAUMCHEV, Boris Aleksandrovich;
FOFANOVA, L.V., red.

[New methods of manufacturing dies and molds] Novye metody
izgotovleniia shtampov i pressform. Saratov, Privolzhskoe
knizhnoe izd-vo, 1964. 48 p. (MIRA 18:12)

FOFANOVA, L.G.

Clinical features of somatic changes in poliomyelitis. Vop.okh.
mat. i det. 1 no.1;20-25 Ja-F '56. (MIRA 9:9)

1. Iz I Detskoy infektsionnoy saratovskoy bol'nitsy (glavnyy
vrach Ye.P.Zakharova)
(POLIOMYELITIS)

HAZAROVA, E.M.; KONYAKHINA, V.N.; TSAREVA, T.I.; FOFANOVA, L.G.

Use of amino acids in the treatment of acute poliomyelitis. Vop.okh.
mat. i det. 1 no.1:37-43 Ja-F '56. (MIRA 9:9)

1. Na baze 1-y gorodskoy detskoy infektsionnoy bol'nitsy Saratova.
(POLIOMYELITIS)
(AMINO ACIDS--THERAPEUTIC USE)

MAKAROV, G.N.; KOROLEV, Yu.G.; VORONIN, M.A.; BOGOSLOVSKIY, Yu.N.;
POFONOVA, M.Ya.

Effect of various factors on the yield of volatile products from
the carbonization of a thin loosely-embedded layer of the coal
charge MKGZ. Trudy MKHTI no.28:73-78 '59. (MIRA 13:11)
(Coal--Carbonization)

FOFONOVA, R.M.

Experimental determination of the binding energy of complexes
in compounds with conjugate bonds. Izv.vys.ucheb.zav.; fiz. no.
3:84-88 '63. (MIRA 16:12)

1. Sibirskiy fiziko-tekhnicheskii institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

SYRNEVA, N.V.; EGOROVA, R.M.;

Determining the equilibrium constants in the process of complex formation of aminobenzoic and aminooxobenzoic acids and their sodium salts with dinitrobenzenes. Izv.vys. ucheb.zav.; fiz. no. 2:46-48 '64. (MIRA 17:6)

1. Sibirskiy fiziko-tekhnicheskii institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

FOFANOVA, T.A.

Category : USSR/Solid State Physics - Mechanical properties of crystals and poly-crystalline compounds E-9

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 1370

Author : Arkharov, V.I., Ivanovskaya, S.I., Kolesnikova, N.M., Fofanova, T.A.
Inst : Inst. of Metal Physics, Ural Branch, Acad. Sci. USSR; Ural Polytechn. Inst., USSR

Title : On the Mechanism of the Influence of Phosphorus and Molybdenum Admixtures on the Temper Brittleness of Steel

Orig Pub : Fiz. metallov i metallovedeniye, 1956, 2, No 1, 57-65

Abstract : Specimens of chrome-nickel structural steel with normal and increased content of P (within its solubility limits) were heat treated to produce a viscous or a brittle state. The fracture surfaces were chemically analyzed using the Tananayev chipless method. It was established that the content of P is substantially higher in the surface layer of brittle (inter-crystallitic) fracture than in that obtained in impact fracture (the latter has in the surface layer a content of P that is equal to the average value obtained by usual chemical analysis for the alloy as a whole). Analogous results were obtained with steels of the same composition, but with Mo added;

Card : 1/2

Category : USSR/Solid State Physics - Mechanical properties of crystals and poly- E-9
crystalline compounds

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 1370

In these cases the enrichment of P in the surfaces of the brittle fracture is less than in steels without molybdenum. It is also established that the diffusion of phosphorus in steel is predominantly along the grain boundaries. The results are explained from the point of view of the theory of the internal inter-crystallitic adsorption of P (Arkharov, V.I., Dokl. AN SSSR, 1945, 50, 293).

Card : 2/2

POFANOVA, T.M.

CAND PHYSICOMATH SCI.

Dissertation: "Spectroscopy of Super-Giants."

1 December 49

State Astronomical Inst. imeni P.K. Shternberg, Moscow Order of Lenin State
V imeni M.V. Lomonosov.

SO Vecheryaya Moskva
Sum 71

FOFANOVA, T. M.

Fofanova, T. M. - "On the effect of dispersion of the spectrograph in studying star spectra and the sun", Izvestiya Glav. astron. observatorii v Pulkove, Vol. XVIII, 1, No. 142, 1949, p. 94-96.

SO: U-411, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 20, 1949).

FOFF, A.; VACLAVIK, J.

Management of workshops. p.70. (Textil, Praha, Vol. 9, no. 3, Mar. 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, No. 6, June 1955, Uncl

FOFF, A.

Remarks on the general inventory. p. 331. (Textil, Praha, Vol. 9, No. 11, Nov. 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, No. 6, June 1955, Uncl

BALEK, A. [Bálek, Alexej]; DANEK, S. [Daněk, Stanislav], inzh.; POFF, A. [Poff, Arthur], inzh.; KOLVODA, Ya. [Kolvoda, Jan], doktor; SHMID, Y. [Schmid, Josef], inzh.; SHKVR, I. [Škvor, J.], doktor; VAYTTS, A. [Waitz, Antonín], inzh.; ROMASHKIN, N.I. [translator]; VEKSHIN, G.K. [translator]; TKACHEVA, T.K. [translator]; OSTROUMOVA, V.S., red.; SEMENOVA, N.Kh., red.; KAPRALOVA, A.A., tekhn.red.

[General inventory of fixed assets in Czechoslovakia] General'nnaia inventarisatsiia osnovnykh fondov v Chexoslovakii. Moskva, Gosstatist.izd-vo, 1959. 101 p. (MIRA 13:2)
(Czechoslovakia--Inventories)

FOFF, J.

Organic coatings as protection of iron against corrosion. (Conclusion) p. 71.
How it is possible to improve the transportation of workers on railroads. Tr. from
the German. p. 72. (Zeleznice, Praha, Vol. 4, no. 3, Mar. 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, No. 6, June 1955, Uncl

FOFF, J.

Mechanical cleaning of outer walls of passenger cars and chances of increased corrosion by cleaning. p. 91.

ZELEZNICNI DOPRAVA A TECHNIKA. (Ministerstvo dopravy)
Praha, Czechoslovakia
Vol. 7, no. 3, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11.
Nov. 1959
Uncl.

ARTYUGIN, I.; FOFLIN, M.

Electric stand for studying traffic regulations; Avt. transp. 36
no. 6:42 Je '58. (MIRA 11:7)
(Traffic regulations--Study and teaching)

MIKHAYLOV, G.P.; MASLOV, Yu.A.; FOFONOV, A.A.; GALAKTIONOV, A.T.;
BOBKOV, Ye.I.; NIKONOV, I.P.; DENISOV, Yu.A.; SHAPKOV, B.K.;
SHATOV, M.Ya.; MIKHAYLOV, S.I.; PETUNIN, I.V.; KHOVANETS, V.K.;
KOCHEVA, G.I.; LABUTINA, E.A.

In memory of A. I. Akhun; an obituary. Svar.proizv. no.12:46 D '57.
(MIRA 11:1)

1.Sotrudniki Ka'edry "Oborudovaniye i tekhnologiya svarochnogo
proizvodstva" Ural'skogo politekhnicheskogo instituta imeni
S.D. Kirova.

(Akhun, Aleksandr Il'ich, d. 1957)

CP

Determination of moisture content by the dielectric constant. László Fekete. Magyar Kém. Lapja 6, 839 (1948).—The method proposed by Kardon (C.A. 43, 8178a) has been used in the Ganz Electric Factory for a long time. However, instead of the dielec. const. the dielec. loss angle served as a base for moisture detns., since this latter is much more sensitive. This angle was measured at first by a Kellner compensating wattmeter, then by a cathode-ray tube; now a Schering bridge is used for this purpose. 1. Finally

FOGARAS, L.

26. Short-circuiting multiple winding transformers - Tobblekarsen transformator rovidrezarase - by L. Fogaras, (Electrical Engineering - Elektrotechnika - Vol. 44, No. 1-2, pp. 57-58, Jan.-Feb. 1951, 2 figs.)

The author describes the phenomena occurring at the short-circuiting of a three winding transformer. By feeding one winding, while at the same time short-circuiting the other two, one of the short-circuited windings will have more ampere turns than the fed one. This contradictory phenomenon is discussed by the author, analysing mathematically the distribution of the currents in the windings and proving the correctness of the deduced equations.

JK SK

SA B 64 c

621.313.333 : 621.3.016.1

2544. Determination of the torque of asynchronous motors during the process of acceleration. L. FODARAS. *Elektrotechnika*. 64, 85-7 (March, 1951) In Hungarian.

The method is based on the phenomena occurring in the rotor of a specially designed motor. The rotor consists of a very thin walled cylinder. The acceleration (da/dt) is measured oscillographically as a function of time and if the m , of I , is known, the torque can be determined directly as a function of time. The torque oscillogram obtained for a 2-pole, 220 V, 14 kW motor is also given. I. 0808

ASME-FLA METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED SERIALIZED INDEXED REF ONE ONE

ABSTRACT

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Installations Switzerland

*B. 1
K*

621.316.57.001.4
661. Two-frequency oscillator circuit for testing the breaking capacity of high-voltage circuit-breakers. 1. FODARAS, *Elekrotechnika*, 44, 304-8 (Oct., 1951) in Hungarian.

The oscillation circuit consists of two interconnected circuits of differing frequencies. The circuit-breaker to be tested is connected into the main circuit in which the current is of mains frequency. This circuit is closed by an auxiliary circuit-breaker, which also closes the second circuit which is tuned to higher frequency. For certain voltage conditions the second circuit the passage through zero of the current through the auxiliary circuit-breaker will precede the passage through zero of the current in the other part of the main circuit by a certain time. If the arc-extinguishes in the auxiliary circuit-breaker at this instant, the two circuits will be series-connected and the total voltage will be the sum of the voltages of the two circuits and the conditions will simulate the real opening conditions from 300-600 μ sec onwards preceding the passage through zero of the current flowing through the circuit-breaker under test. The circuit arrangement is described and experimental results obtained on various h.v. circuit-breakers are given. The cost of such a test circuit is about 1/10 of those involved in building a comparable surge generator.

E. GROS

POBARN, L. : BELLEVILLE, NY.

"Automatic static voltage regulator for generators" p. 131; "Movement for the improvement of quality in the Hungarian Electrotechnical Association" p. 111, (SIEMENS) TROTECHNIKA, Vol. 16, no. 5, May 1953, Budapest, Hungary)

SO: Monthly List of East European Accessions, L.C., Vol. 2, No. 11, Nov. 1953, Uncl.

FOIA(b)(1).

"Hungarian-Soviet Friendship Month", P. 65, VIHAKOSZAG, Vol. 2, No. 3,
March 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 4, No. 3,
March 1955, Uncl.

FOGARAS, L.

"Present State of the Manufacture of Prime Necessities; a Letter to the Editorial Board." p. 660 (MAGYAR TECHNIKA. Vol. 9, No. 11, Nov. 1954; Budapest, Hungary.)

So: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4, April 1955, Uncl..

POMARAS, L.

"We Should Make the Work of Scientific Societies more Intensive. Tr.
From the Russian." p. 663 (MAGYAR TECHNIKA. Vol. 9, No. 11, Nov. 1954;
Budapest, Hungary.)

So: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4,
April 1955, Uncl..

BOARD, I.

"Jozsef Liska's Villamos gépek. V. Szerkezetian (Electric Machines. V. Theory of Structures); A Book Review", P. 351, (ELEKTROTECHNIKA, Vol. 47, No. 11, Nov. 1954, Budapest, Hungary)

SC: Monthly List of East European Accessions (EEAL), LC, Vol. 4, No. 3, March 1955, Uncl.

FOGARASI, Gyulane

The director's funds - cultural expenses. Munka 10 no.12:22-23
D '60.

1. Szakszervezetek Országos Tanácsa kulturális osztályának
munkatársa.

FOGARASI, Gyulane

Money management of cultural homes. Munka 13 no.5:24 My '63.

1. Szakszervezetek Orszagos Tanacsa fokonyvelosegenek munkatarsa.

FOGARASI, Laszlo, dr.

The wandering lake. Elet tud 17 no.4:111-115 Ja '62.

FOGARASI, Laszlo, dr., tanar

Excursion as one of the main tools in disseminating knowledge in summer. Munka 13 no.6:27 Je '63.

FOGARASI, Laszlo, dr.

Belgrade. Elet tud 19 no. 7: 310-315 14 F '64.

FOGARASI, M.

Melyepitestudományi Szemle - Vol. 5, no. 3, Mar. 1955.

Two weeks at the construction site of the hydroelectric plant in Kahovka. p. 112.

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 9, Sept. 1955
Uncl.

FOGARASI, Mihaly

What was the matter of the deliberations of the specialists
of road construction? Auto motor 15 no.2:3 Ja '62.

1. A KPM Ut- es Hidfoosztaly osztalyvezeto formernoke.

FOGARASI, Mihaly, fomenck

Forthcoming tasks of the construction industry in the service of our transportation network. Kozleked kozl 21 no.8:127-128 21 F '65.

1. Ministry of Transportation and Postal Affairs, Budapest.

FOGARASI, Szalo, dr.

The area of Spis. Elet tud 19 no. 26: 1222-1226 26 Je '64.

FOGARASSY, Balint; PALINKAS, Jozsef

Quartz, atom and molecule clocks. Fiz szemle 8 no.10:311-316 D '58.

1. Kozponti Fizikai Kutato Intezet.

ACC NR: AP0020801

IN/0074/65/013/001/0017/0100

AUTHOR: Fogarassy, Balint

ORG: Central Research Institute for Physics (Kozponti Fizikai Kutató Intézet)

TITLE: Conductivity characteristics of solids

SOURCE: Magyar fizikai folyóirat, v. 13, no. 1, 1965, 47-106

TOPIC TAGS: thermomagnetic effect, thermoelectric property, galvanomagnetic effect

ABSTRACT: The dynamic properties of the electron moving in the potential periodic field were investigated and the solution of the transport equation was derived in the form of a series transformation according to external factors such as electrical field, temperature gradient, and magnetic field. The generalized solution was applied to approximations of various degrees of order. The thermo-electrical, galvano-magnetic, thermomagnetic, and galvano-thermo-magnetic effects were discussed in terms of these approximations. The validity range of the relaxation-time approximation was determined. In an appendix, (pp 93-106) methods for the calculation of some commutators and verification of the lemmas presented in the text were described. Orig. art. has: 355 formulas. [JPRS]

SUB CODE: 20 / SUBM DATE: 10Jul64 / ORIG REF: 002 / OTH REF: 056

Card 1/1 *CO*

FOGARASSY, Ibolya, dr.

Control studies on the agar-fixation test in the diagnosis of cancer. Orv. hetil. 101 no.29:1015-1018 17 J1 '60.

1. Az Országos Onkológiai Intézet Kósponti Laboratóriuma
(NEOPLASMS diag)
(AGAR)

FOGARASSY, Laszlo (Pozsony)

Contribution to the history of the No.5 Red Division. II.
Borsod szemle 7 no.1:73-79 '63.

1. Tudományos kutató.